GRAZING NEWS

A PART OF THE NORTH WEST ENVIRONMENTAL STEWARDSHIP PROJECT

This Ranch Watches the Pennies

When talking with Gary Nickel, it soon becomes obvious that he is enthusiastic about the cow/calf industry. He takes the business seriously, paying close attention to production and to the financial and marketing aspects which are crucial to the bottom line.

Raquel and Gary Nickel
Photo courtesy Mona Thiessen

Gary, his wife Shari and their family operate the third-generation Nickel Ranch northeast of Borden. The last few years they have calved around 300 cows, though according to Gary, they are not set on any certain number of cows – rather, they simply expand the herd when it makes sense economically.

One advantage to ranching near the North Saskatchewan River is the abundance of pastureland nearby. The ranch has two main blocks of pasture within five miles of the headquarters. This allows them to trail cows to and from pasture as well as make use of a pasture pipeline from the water well at the yard.

Over the last few years, they have also taken on several quarters of pastureland in partnership with a fellow producer. This arrangement has allowed for expansion of grazing land while sharing labor and capital costs.

Recently, the ranch has had enough extra forage to do some custom grazing to complement their own cow herd. "It is nice when they go home in the fall and you don't need any feed for them," Gary says.

Nickel is also a member (and current president) of the nearby East Borden Grazing Co-op, a 1,000-head community pasture. This organization takes advantage of neighborly co-operation and a part-time pasture manager to provide economical summer grazing for their cattle.

One production factor that the Nickels keep a close eye on is their feed costs. To help reduce the amount of winter feeding that needs to be done, they try to keep the herd on pasture until December. That means they must plan their grazing rotation to save some pastures until fall.

When it does come time to take the cattle off pasture, the Nickels use cereal swath grazing as their main method of winter feeding. Gary proclaims that he "hates feeding cows" and strives to let the cows do as much of the work as possible. He knows that every time he starts his tractor it costs him money, noting that he has calculated $20 per hour in depreciation alone!

Even throughout calving, the pregnant cows are moved out to the swaths each morning and come home each night. This way, only the nursing mothers need to be fed each day. This helps free up more time to supervise the calving process.

Nickel speaks highly of the current popularity of agri-environmental programming. He has been able to make good use of funding from Agriculture and Agri-Food Canada, the Saskatchewan Watershed Authority, and Ducks Unlimited Canada to help with seeding forages, cross fencing, portable windbreaks and calf shelters, a solar watering system, and a GPS unit.

This programming has allowed him to move more quickly towards his long-term goals for the ranch by giving him more options for providing forage, water, and shelter. He has also received funding for some of these projects through the Redberry Lake Watershed Agri-Environmental Group Plan, and appreciated the technical support available through this community initiative.

The Nickels have put careful thought into their production cycle, choosing a staggered calving season.

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The first group of cows starts calving around the second week of February, with other groups starting in early March and early April. That allows them to spread out the labor in the spring and make more use of their facilities. Having different breeding groups also lets them make better use of the bull battery.

Contrary to what you often hear these days, Nickel believes that it is the early calving cows that net him the most money. With his management system, he calculates that they don't cost him much more, yet the higher weaning weights equal more dollars at the sale.

When he's not out on the land, Gary likes to spend time thinking about how to tweak the workings of the ranch. He enjoys reading farm publications and attending a few shows and field days to get new ideas from other producers' experiences. He also recognizes the importance of having good written records to keep track of progress. Nickel is quite willing to use management tools like premium vaccines and creep feeding where it is cost effective.

Each of the management strategies used on the Nickel Ranch helps them achieve their overall objective: to wean the biggest possible calves and do it as cost efficiently as possible. Experience has taught them that putting effort into management is one of the keys to that goal.

Squaring Up Fields Saves Money and Protects Water

With agricultural input costs constantly on the rise, producers are always on the lookout for opportunities to pare back their expenses. One way to save on inputs is to square up fields next to waterbodies – something that also helps protect the water.

With so many creeks, rivers, sloughs, lakes, and so on in northwest Saskatchewan, most producers likely have some land that butts up against a waterbody. This usually makes for fields with meandering, irregularly-shaped perimeters which are difficult to work with the increasingly large equipment being used today.

"Seeding every available inch of field right up to the water's edge usually isn't cost efficient. For example, working your way into all those curves and corners with a 60-foot set of air drills is not only frustrating, you also need to make more turns, you're spending more time out there and burning more fuel, and you waste seed and fertilizer due to over-application," says Tammy Miller, Agri-Environmental Technician with the Saskatchewan Watershed Authority.

"In a lot of cases, it might make more sense to use those few acres along the water to grow something else, rather than seeding them to annual crops year after year."

According to Miller, there are many perennial crops that producers could consider planting in these areas. She notes that there is information available from the Conservation Learning Centre about these options, and how they might fit into a producer's bottom line. This information can be accessed at www.conservationlearningcentre.com.

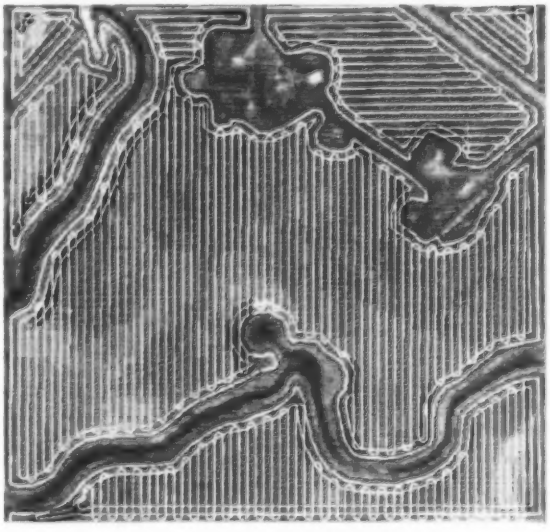
In addition, a soon-to-be-released study conducted by the Prairie Agricultural Machinery Institute looks at several options to lower mechanical overlap, including squaring up the field. The report, which will be available at www.pami.ca, looks at the factors that lead to overlap and includes case studies on the costs and potential benefits of different ways to reduce it. In these examples, overlap varied from five to15 percent, a range that impacts the bottom line. Variables such as field size, field shape, and use of guidance equipment were found to be more important than terrain and obstacles.

Miller points out that squaring up fields is not only a good idea economically, it also can help protect water by ensuring that the riparian area is healthy and functioning.

"Riparian areas are important because they trap sediments and filter nutrients that are found in runoff, produce vegetation, slow down water flows, stabilize the streambank and control erosion, and also recharge our groundwater supplies," says Miller.

"When riparian areas are doing those jobs properly, they help ensure that our water will be safe for human and livestock use."

Financial assistance is available for producers who are interested in squaring up their fields. For more information, contact Jeremy Brown at (306) 446-7460 or e-mail jeremy.brown@swa.ca.



This field, seen from above with the croppable areas highlighted, is broken by a stream, which produces numerous curves and corners that lead to mechanical overlap. There are several options available to reduce this overlap.

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Enhancing Your Pasture Monitoring

By Glenn Barclay
Forage Development Specialist
Saskatchewan Agriculture and Food

It is not uncommon to find grain or oilseed producers who keep meticulous records of their fields. Seeding dates, weed populations, soil test results and yields are all carefully noted. GPS mapping has taken field monitoring to an even higher level.

Many livestock producers would concede that better pasture monitoring and record keeping would also be beneficial on their land base. So how do you go about accomplishing this?

Knowing the species of plants and how they react during the growing season is important. Identifying native grass species is tricky but you can take advantage of local grazing clubs, field days, agrologists, publications and internet sites that will assist you. Aerial images are also available to help determine acres of your fields. Saskatchewan Agriculture and Food has seven Forage Development Specialists across the Province to assist you. You can contact me at the North Battleford office at (306) 446 - 7650 for technical assistance on any of these topics.

Rainfall data can also be recorded using rain gauges set up in strategic spots. If you are unable to check gauges frequently, mineral oil (available at drug stores) can be added to gauges to prevent evaporation.

The calendar date does not always coincide with the best time to start grazing. Grazing too early can reduce grass production by 20 to 70 percent. The recommended stage for beginning spring grazing is when plants have three to four leaves.

Air temperature is the main environmental factor that determines the rate of plant development. The amount of time it will take a plant to mature under various temperature conditions can be calculated in growing degree days. This measurement assumes that plant development will only occur when temperatures exceed a certain base temperature.

Growing degree days are calculated by taking the maximum and minimum temperatures for the day, adding them together and then dividing by two. The base temperature is then subtracted from this figure to give a daily growing degree day.

Research at North Dakota has determined that the accumulated growing degree days required to reach the third leaf stage varies between grass species:

GRASS SPECIES	GROWING DEGREE DAYS (CENTIGRADE SCALE)
Crested wheatgrass (var. Nordan)	246
Western wheatgrass (var. Rodan)	297
Intermediate wheatgrass	375
Prairie June grass (native species)	360
Needle and thread (native species)	483
Green needle grass (native species)	576
Blue grama (native species)	590

This is why Crested wheatgrass is referred to as the "early grazing grass," while native species such as Green needle grass require more time in the spring before initial grazing.

The growing degree days required for regrowth after a grazing event is not the same as initial heat requirements for development in the early spring. For example, Crested wheatgrass required 206 more growing degree days to produce a leaf during regrowth compared to initial spring growth. Studies in North Dakota also showed plant development is a function of accumulated growing degree days and is not a function of water or Nitrogen levels.

Careful observation and recording of your grass growth over the growing season will guide you in cattle movement and distribution. "Take half, leave half" is a useful guideline when referring to grass growth and when to move cattle.

At the end of the season, record how much carryover you have in your fields and note any problems that are developing, such as weeds or overgrazed areas. Animal weight gains, take-in, take-out dates and carrying capacities should be recorded and stored in a binder or on your computer. During the winter you can examine any problems you encountered and what worked well. Analyze every paddock and determine what strategy you will employ for next year. Improved records and enhanced forage management will have a positive impact on your bottom line!

Identifying the plant species in your pastures can help you manage your grazing.

Additional Money Available for Implementing Beneficial Management Practices

If you're a producer thinking of relocating your livestock confinement facilities, improving runoff control in your farmyard, or taking steps to better manage your water well, additional funding assistance is now available to you.

The Saskatchewan Watershed Authority has received funding through Saskatchewan's Green Strategy to further assist producers in implementing three key practices that are being encouraged in the Canada-Saskatchewan Farm Stewardship Program.

Producers are eligible to receive an additional 25% of the cost of implementing projects related to:

- farmyard runoff control (maximum $500);
- relocating livestock facilities such as corrals (maximum $5000); and
- sealing and protecting water wells (maximum $500).

"These practices have a wider benefit to the population and the surrounding watershed than just one particular farm or individual, and we want to help producers who are willing to make those changes. Everyone is eligible, whether you've already completed an Environmental Farm Plan or made an application through an Agri-Environmental Group Plan, or whether you haven't done so yet," says Jeremy Brown, Range Agrologist with the Saskatchewan Watershed Authority.

Projects which have already been completed through the Farm Stewardship Program are also eligible.

The additional Green Strategy funding is available for project costs that are over and above those covered by the Farm Stewardship Program funding.

For details on the Canada-Saskatchewan Farm Stewardship Program, and Environmental Farm Plans, go to www.saskpcab.com or call 1-866-298-7222.

All of these practices help protect source water by minimizing the potential for negative impacts.

For more information on Agri-environmental Group Plans and the additional funding available through Saskatchewan's Green Strategy, please contact John Kindrachuk at (306) 549-2360.

UPCOMING EVENT

Winter Feeding, Ranch Economics and Future Opportunities in the Livestock Industry

January 8, 2008 Hafford Communiplex

Featured speakers include: **Dr. Christoph Weder**, Rycroft, AB
Bruce Chern, Stockholm, SK
Steve Kenyon, Pickardville, AB

For information and to register please contact John Kindrachuk at (306) 549-2360.

The North West Environmental Stewardship Project participating partners:

Saskatchewan Watershed Authority

Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada

Western Applied Research Corporation

Saskatchewan Agriculture and Food

Saskatchewan Soil Conservation Association

Ducks Unlimited Canada

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